

Chapter 2 Core theme: Knowledge and the Knower

Handout

Accepting knowledge as justified

How do we know if our claims are 'justified' enough for knowledge?

When would you say a knowledge-claim is 'justified'?

Try to think of a number of conditions under which you would consider a claim to be justified.

Compare your list with the conditions that follow. Do your conditions fit within one or more of the conditions?

Here are four general conditions which would allow us to feel confident when accepting a justification for a claim:

1. When the methods of justification are reliable

Even though someone might be able to give reasons why they have accepted a belief, this does not mean that these justifications should be accepted, or that the justifications themselves be considered reliable. Take, for example, 'dowsing', which is a practice of using Y- or L-shaped rods or pieces of wood to find minerals and water deep underground. The practice has been around since at least the sixteenth century in Europe, and purports to be a reliable method of locating important resources below ground. Dowsers walk while holding the ends of the rods and when the dowser is near the required resource, their arms will point down to the ground at a point where they will start digging. Were a dowser to use this method and arrive at the claim 'there is water beneath me', they might think that this claim would have justification – they would have reason to claim that this is where we should be digging.

However, the justification for this belief has been shown again and again as being no more successful than guessing. Were a dowser to form a belief that 'there is water beneath me' and it turned out that there *was* water beneath them, we would have seen nothing more than a lucky guess; not something which we would say was reliably found and not something we would therefore say was 'knowledge'. Establishing whether the methods of gaining knowledge are reliable is a significant part of research into the sciences.

Use the QR code to watch a video that shows how dowsing fails when subjected to a double-blind trial, one of the methods by which claims can be determined to be reliable or justified.



Many consider acupuncture to be a pseudo-science, a practice that *looks* like its reliability is based on scientific principles but is not. In this case, however, the evidence for the claim that ‘acupuncture is a reliable treatment for pain relief’ depends on the *subjective reports* of patients. There can be no appeal to an objective event in the world because pain is *private* to the individual suffering from pain. If someone claims, ‘I am in pain’, or ‘I am not in pain’, then we really have no choice but to believe them.

‘Acupuncture is a reliable treatment for pain relief’ is a claim made by many, and there are many accepted studies which suggest this might be the case. The US government has even classified acupuncture needles as ‘medical devices’ (though this might have been simply to regulate the wide use of them for safety reasons, not because they have been accepted as reliable treatment). Nevertheless, there is some legitimate debate in ‘western medicine’ about whether the treatment is actually effective. One reason why claims about the effectiveness of acupuncture are problematic in the context of western medicine is that the *mechanics* of acupuncture (the way it is said to work) relies on a perspective that is at odds with a western notion of how the body functions. In Traditional Chinese Medicine the body contains within it a ‘vital energy’ or *qi* (pronounced ‘chee’); when the proper flow of this energy is blocked, pain and illness are a result. The acupuncture needles, when properly applied, free up this energy and the body’s energy flow returns back to its natural state. This notion of *qi* is not a concept in the theories about how the body works from the western perspective. Claims about the effectiveness of treatments which are based in a such a different theoretical understanding will be less acceptable to scientists who do not subscribe to those theories.

Nevertheless, even though the ‘western’ perspective might not accept *qi* as an explanation, the fact remains: people claim to feel less pain having undergone acupuncture. So, the initial claim, ‘Acupuncture is a reliable treatment for pain relief’, might be justified, because the methods used to justify the claim (asking people), is a reliable process.

Question: How best do we establish the reliability of our justifications for belief? How do we decide among competing theories explaining the same phenomenon?

2. When conventions or rules of community are followed

Another element to keep in mind when considering whether you should accept a belief as ‘knowledge’ or not, is whether the generally accepted rules and conventions of the community of knowers have been followed in developing the claims in the first place. As a mathematician, for example, you cannot *hope* that some inference is possible in solving an equation, you must use established rules of mathematical deduction to move from one step to the next in a theorem. Teachers ask you to show your work so they can see the steps you have taken and decide whether you can do mathematics in the right way.

In a real-life case from another AOK, academic biblical scholars spend a lot of time following the rules of historical research in order to establish which elements of the Christian New Testament represent genuine history.

For example, biblical scholars, in conducting historical investigations about what Jesus of Nazareth actually did, or what he actually said to his disciples in the first century CE, hold two basic principles which are in keeping with general historical research:

The closer in time a text is in relation to the events described, the more reliable it will be.

The more often that unrelated sources claim some event happened, the more likely it is that the event happened.

Using these elements of the historical method, biblical scholars are reasonably happy to use the material from the New Testament to make historical claims. For instance, they accept that Jesus caused a scene in the Temple of Jerusalem and that this was a key factor leading to his death, and they also accept that that Jesus gained a reputation as a popular preacher of repentance in the villages around the Sea of Galilee.

These are generally accepted as historically reliable claims because the earliest texts that outline the events (the first books of the New Testament), were written within a generation or two of the events described, and the facts are described in more than one source from that time.

Scholars are far less willing, however, to claim that it is ‘known’ that Pontius Pilate, the Roman governor of Judah at the time, was reluctant to execute Jesus. Despite the fact that this is suggested in all four Gospels, it directly contradicts other sources which describe Pilate as an especially hot-tempered and unforgiving administrator. This claim then, violates the second principle listed earlier. An individual religious believer, however, might accept this claim on other grounds (perhaps faith, tradition or authority), but in this case it would not be a claim the historical community would accept, because the justification for it is weak in terms of the conventions of that community. It violates the historical method.

3. When we approach the issue in good faith – conscious of any obvious biases or influences

There are a number of ‘logical fallacies’ and biases that we are prone to when trying to construct claims about the world that we accept as true. That we are prone to them is a pretty well-established fact: the field of psychology is a long list of ways that our non-conscious beliefs affect what we claim to know about the world and how these can be used to question the reliability of our knowledge.

Knowing that this is a worry, then, we must take care to avoid these biases and fallacies as much as possible when constructing our knowledge claims. Imagine you dismissed a well-reasoned and well-justified argument by someone who happened to have opposing political beliefs to you. This would, however, be to commit the *ad hominem* fallacy, which means that you have ‘attacked the man [person]’ rather than the argument. You have used irrelevant facts about an individual to dismiss their arguments.

This is a genuine social problem: historically, individual views in business or in politics have often been ignored or not given credit simply because they were made by women. In cases where the gender of the speaker is not relevant to the discussion, not giving credit to a woman simply because she is a woman is to ‘attack the person’ rather than the position the person is putting forward. In Harper Lee’s *To Kill a Mockingbird*, Atticus Finch is defending Tom Robinson, a black man accused of the rape of white girls. He reminds the jury *not* to commit the fallacy thinking that because Tom is black, he will not tell the truth. This is an *ad hominem* argument because the fact that Tom is black has no bearing on whether he tells the truth. The jury, however, cannot overcome their inherent prejudice: they convict Tom of the rape. Because they were unable to overcome their obvious bias, their claim that ‘Tom Robinson is guilty of the crime’ was unjustified.

Another difficult bias to overcome is called ‘confirmation bias’, which describes the tendency to accept only the evidence which confirms our previously held beliefs and to ignore or discard evidence which challenges our beliefs. With the rise of social media over the last decade this tendency has taken on more and more importance. Our connections on social media have created ‘filter bubbles’ where we tend to connect on social media with others who have similar social and political beliefs. This can result in a narrow range of information that we are presented with every time we log into our social media accounts. This results in further embedding what we already believe, rather than broadening our information and understanding.

Sometimes using various approaches to knowledge construction can help mitigate (though not always defeat) the influence of perspective or bias. Using a variety of methods to test a claim helps to independently verify the claim.

4. Where there are no missing facts which otherwise would have shown it to be false

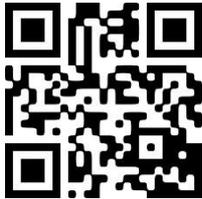
When you have evaluated the justification for a claim and have decided to accept it, you might have wondered whether there are any other facts that you *should* know. And more importantly, would knowing those facts lower your willingness to accept a belief?

You might, for instance, be conducting some online research into whether some drug is effective or safe, and you conclude that it is safe. Suppose, however, that you didn't know that the research you are reading is financed by drug companies that have an invested interest in the research saying that the drug is safe and which might skew the results that you are now reading. This is called the 'funding effect' and has been shown to have a negative effect on the supposedly objective truths of scientific research.

If you had known this, you might not have been so quick to accept the claims of the study. In other words, the fact that the drug companies were financing the research might be a 'defeater' in that this new fact 'defeats' the justifications you have found for the claim and you might want to hold back from accepting it.

We might apply this notion also to individuals whom we think of as experts in a field. However, were you to find out that someone claiming that 'vaccinations are dangerous' has no experience in immunology (the scientific study of the immune system and how it combats disease) or medicine, or that they only think this because of a video they watched on YouTube, this fact becomes a defeater: the reliability of their claims on this topic, about which they actually know very little, is weaker.

Use the QR code to watch a TED talk by Ben Goldacre, a medical doctor and scientist who studies diseases, in which he illustrates how scientific research is often manipulated to make us think treatments and drugs are effective, when they are not.



Question: How can you be sure that you have adequately tested for other relevant facts which would 'defeat' your justification? Is this even possible?

Discussion questions

- 1** Which of the reasons above do you think are the best reasons to accept a claim as ‘justified’?
- 2** Is it even possible to know for certain that a claim is ‘justified’?
- 3** If we cannot know for certain that a claim is justified, should we avoid saying that we have knowledge?
- 4** Do some areas of knowledge naturally have better justifications?
- 5** Does the fact that we might have once accepted a belief as ‘justified’, but do not anymore, make us think that knowledge is not possible?
- 6** How are reliable methods for justifying beliefs established?
- 7** How do we engage with non-experts who are simply unconvinced that some claims are justified, even when all the experts in a field say that they are?
- 8** If a non-expert claims to have evidence about some accepted claim, how might we use the conditions listed previously to challenge them?